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**VIA ELECTRONIC MAIL ONLY**

Sherri L. Golden, Secretary  
New Jersey Board of Public Utilities  
44 South Clinton Street, 9th Floor  
P.O. Box 350  
Trenton, New Jersey 08625  
[Board.secretary@bpu.nj.gov](mailto:Board.secretary@bpu.nj.gov)

**RE: In the Matter of the New Jersey Energy Storage Incentive Program  
Docket No. QO22080540**

Dear Secretary Golden:

On behalf of Jersey Central Power & Light Company ("JCP&L"), attached please find for filing with the Board of Public Utilities JCP&L's comments in response to the Request For Information published by the Board in the above-referenced proceeding.

If you have any questions, please feel free to contact me.

Respectfully submitted,



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**ANSWERS OF JERSEY CENTRAL POWER & LIGHT COMPANY**  
**IN THE MATTER OF THE NEW JERSEY ENERGY STORAGE INCENTIVE**  
**PROGRAM**  
Docket No. [QO22080540](#)

Jersey Central Power & Light (“JCP&L” or the “Company”) submits answers to the questions posed by the Board. JCP&L notes that the electric distribution companies (“EDCs”) should be eligible to recover in a full and timely manner the costs to implement the program.

**1.1 What are the advantages and disadvantages of utility control versus non-utility control of energy storage systems?**

JCP&L is concerned that prohibiting EDCs from owning and operating energy storage resources will hinder the State’s ability to achieve the goals set forth in the NJ Storage Incentive Program (“SIP”) and Energy Master Plan (“EMP”). While it is not clear whether Staff intends to preclude utility ownership and operation completely, or within the confines of this Program, to achieve the grid supply and distributed energy resource (“DER”) goals, all available storage resources, including EDC-owned and operated resources, must be leveraged under the NJ SIP program, and generally. EDC participation is essential to ensure a robust and smooth storage build-out and integration that promotes stated objectives.

EDCs are in the best position to evaluate where energy storage resources should be optimally located to provide the most benefit for the electrical grid at the least cost to customers. While DERs typically focus on augmenting reliability and resiliency, properly located DERs also have potential environmental benefits as peak demand can be shifted away from reliance on fossil generation. Furthermore, with respect to storage in particular, the amount and placement of energy storage resources is dependent on the unique needs of each EDC to ensure benefit, and mitigate potential harm, to the distribution grid.

Similar storage initiatives have been launched both in California<sup>1</sup> and New England, and because EDCs are viewed as an important partner in the energy storage solution there, they have been allowed to own storage resources.<sup>2</sup>

New Jersey’s EDCs have the inherent motivation to develop energy storage resources that can consistently provide benefits through Grid Supply or via stationary or mobile batteries exclusively intended for distribution and/or transmission use when needed by the utility, and not to be utilized for competing obligations or as a generation asset. Representatives from various industry sectors have agreed in oral comments directed to the Board that EDCs should not be precluded from owning and operating storage; therefore, we suggest the Board should revise the NJ SIP to allow EDCs to build, own, and operate energy storage resources intended to not only support, but also expedite, the achievement of New Jersey’s energy storage goals. If, however, the Board chooses to limit or exclude EDC ownership and/or operation of energy storage resources under the NJ

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<sup>1</sup> See Tracking Progress - Energy Storage (ca.gov).

<sup>2</sup> “In most New England states, utilities have been granted the right to own energy storage assets.” “This can be helpful in driving large-scale energy storage markets.” *Energy Storage Policy Best Practices from New England Ten Lessons from Six States*, Todd Olinsky-Paul, Clean Energy Group Clean Energy States Alliance (August 2021) at 30 & n.58 (noting, “In Maine, utility storage ownership rights may still need some clarification”).

SIP, it should make clear that EDCs may still own and operate storage assets that are not participating in the NJ SIP when such storage assets are being used as a distribution and/or transmission resource. Moreover, if EDCs are excluded from the NJ SIP, projects participating in the NJ SIP should not be given preferential treatment and allowed to displace EDC proposed storage projects.

As previously noted, there are significant potential reliability and resiliency benefits associated with properly integrated energy storage resources. If the Board moves forward with a blanket prohibition against EDCs owning and operating energy storage resources, it will severely limit the opportunity for realization of those reliability and resiliency benefits.

### **1.2 For Distributed resource Performance-based Incentives, should responding to a utility signal be compulsory or voluntary?**

For DER receiving performance-based incentives, response to utility signals should be compulsory.

In PJM's recent filing related to Order 2222, PJM recognizes the importance of the utility process and notes that "The Office of the Interconnection shall not take any actions to interrupt or interfere with the Electric Distribution Company's decision to override and will re-dispatch the DER Aggregation Resource to reflect its updated bidding parameters."

### **1.3 For Grid Supply resources Performance-based Incentives, should responding to a market signal be compulsory or voluntary?**

Performance based incentives for Grid Supply resources that follow wholesale market rules for compliance should be utilized where possible. Grid Supply resources must perform according to market rules but can also provide flexibility for unforeseen circumstances.

### **2.1 How should capacity blocks be structured and proportioned, both within each component of the NJ SIP (Grid Supply and Distributed) and relative to each other?**

The Company conditionally supports the Straw Proposal's use of a declining block structure, including the proposed use of \$/kWh incentives for both Grid Supply and Distributed Resources to help achieve the storage requirements at lower costs in subsequent auctions. Incentive level pricing and block size should be determined by Staff (or a program administrator) and not by the EDCs. The Grid Supply annual incentive should be the same for all EDCs to prevent a project from being sited in one EDC territory and that project seeking incentives from another EDC. Additionally, the blocks should be evaluated and potentially adjusted on an annual basis akin to the existing Successor Solar Incentive ("SuSI") process for solar.

### **2.2 Should the proposed first-come, first-served application process be changed to a "First-Ready, First-Served" process?**

The Company agrees with the Straw Proposal that block allocations be established on a first-come, first-served methodology.

JCP&L further agrees that the proposed maturity requirements are sufficient to appropriately limit risk associated with block allocations. It would be helpful for the Board to clarify what constitutes a major versus minor deficiency for the purpose of mitigating potential disputes.

### **2.3 How should the program be designed to avoid or minimize interconnection delays? Should the interconnection process be modified for accommodating energy storage and if so, how?**

The Straw Proposal requires projects to meet one of the following criteria at the time they reserve megawatt (“MW”) capacity in a block: (i) demonstrate a sufficiently advanced position in the PJM queue (taking into account the realities of the ongoing PJM Interconnection, LLC (“PJM”) reform process); (ii) demonstrate a comparable interconnection position in a state-jurisdictional queue; or (iii) for net metered projects, demonstrate conditional approval of their utility interconnection request. Energy storage projects would pay a non-refundable solicitation participation fee of \$1,000 per MW of nameplate capacity. For projects not interconnecting via the PJM interconnection process, the Straw Proposal recommends that these projects be required to provide evidence of having filed an interconnection application with the applicable EDC and having received Part 1 Approval, as defined in N.J.A.C. 14:8-5. The Straw Proposal notes that it is not possible to finalize queue position requirements for projects submitted under the new queue rules until the outcome of the PJM queue reform process is known.

For Grid Supply projects, the Straw Proposal recommends using queue position. It notes that if PJM’s queue reform is adopted, it is likely that projects not already in the PJM queue will be unable to demonstrate any queue position until 2026 and not achieve commercial operation until at least 2028. For net metered projects, the Straw Proposal suggests requiring a signed letter of intent with the host location and that projects have Part 1 Interconnection Application executed.

JCP&L notes that on June 14, 2022, PJM filed with FERC its proposed *Tariff Revisions for Interconnection Process Reform*. On June 16, 2022, FERC issued *Improvements to Generator Interconnection Procedures and Agreements*. On November 29, 2022, FERC approved the PJM Interconnection Filing subject to the condition that PJM submit two compliance filings. In the Interconnection Process Reform Filing, PJM estimates that the new interconnection process will start with AG-2 Queue in June 2025. Under the recently approved Interconnection Process Reform Filing, the study process could take up to two years before a generator interconnection agreement s executed for a project in the queue and before PJM starts a new queue. The Company asserts that this may inhibit energy storage projects and delay their ability to interconnect to the grid via the PJM process.

As the Board is aware, energy storage is not currently a renewable energy resource authorized for net metering under the Board’s regulations or applicable New Jersey law; therefore, any energy storage participation may require modification to New Jersey law and regulations, as well as changes to each EDC’s net energy metering tariff.

Lastly, great care should be taken to not corrupt the energy accounting equation, which balances energy supply and demand, when providing incentives to energy storage resources. Energy storage resources should be limited to being accounted for on either the supply side or the demand side of the equation, never both. This means that an energy storage resource that is supplying energy behind its retail meter on the supply side of the equation to serve load not located behind its meter, should not be able to use that same energy to net its load to zero on the demand side of the equation.

JCP&L supports the Commercial Operation Date criteria proposed in the Straw Proposal. It is imperative that the Board requires that the energy storage resources interconnect to the distribution system in such a manner that they do not interfere with the EDC's ability to provide safe and reliable service to its customers. Each EDC will need to institute separate interconnection and participation agreements because each EDC's distribution grid infrastructure is unique and, therefore, the native EDC is in the best position to determine the appropriate standards to protect its system safety and integrity.

For an energy storage project to be fully commercially viable, the energy storage project must have been studied for the type of operation it has requested to be interconnected for and must have an interconnection/construction agreement executed where all the necessary utility upgrades have been identified and subsequently constructed, and the customers facility approved by the EDC. Moreover, adherence to standards, e.g., IEEE1547-2018, by energy storage resources will be necessary such that EDCs may study each interconnection application, understand device operations, and evaluate the interconnections considering any potential benefits and impacts that may adversely affect the safety and reliability of the distribution system. In addition, before a project is commercially viable, market rights need to be in place for energy taken from or pushed into the distribution grid for settlement purposes. JCP&L notes that this approach is consistent with both FERC Order No. 2222 and the PJM Compliance Filing.<sup>64</sup> In the PJM Compliance Filing, PJM defers oversight of the component DER participating in an Aggregation to the respective Relevant Electric Retail Regulatory Authority (*i.e.*, the BPU) and requires that any component DER participating in an Aggregation have an approved interconnection agreement by the applicable electric distribution utility.

### **3.4 Should a Distributed energy storage resource that can provide grid services have the ability to opt in to either the Grid Supply or the Distributed storage program, for both the Fixed and Performance-based incentives?**

The Company agrees with the Straw Proposal's requirement that energy storage developers not be allowed to participate in both the NJ SIP and the SuSI's Competitive Solar Incentive ("CSI") program at the same time. JCP&L also agrees that energy storage developers should be afforded the flexibility to select which program, CSI or NJ SIP, benefits their project the most. The Company does not oppose allowing a project not selected for one program from being permitted to apply for the other. This will ensure that projects can seek appropriate incentives but that ratepayers are not overburdened by any individual project by paying two different forms of incentive.

### **3.6 Is there a different methodology that can be used to determine Performance-based Incentives, such as a Peak Demand Reduction program?**

The performance hours of the Distributed Resources program should be flexible based on the specific system needs of each EDC. While managing summer peak load conditions is a good first step in program design, the program needs to consider the customer's intended purpose of the installed device and related limitations. Additionally, not all storage devices will be needed to provide summer peak load reductions – some may be used to store energy during summer peak solar export conditions, which may also occur during summer peak load conditions. JCP&L fully expects system load conditions to change as electrification of vehicles, building space, and water heating progress, which will cause the need for changes in the program operation for these storage devices.

**3.7 If a Peak Demand Reduction program were to be developed, how should it be structured? What other states have similar programs that New Jersey should use as a benchmark?**

There should be significant flexibility for each EDC to establish program call hours. Due to increasing electrification and shifts in load, there needs to be a simple and straightforward protocol for the EDCs to adjust program call hours for NJ SIP participants. The Company agrees that, traditionally, electricity usage peaks in the summer; however, with increasing electrification, PJM anticipates a shift to winter peaking.<sup>3</sup> JCP&L is concerned that focusing on summer peak hours may help reduce peak demand at the cost of dissuading energy storage resources from providing other services, such as increasing hosting capacity for DERs and providing additional resiliency. It also fails to account for the unique customer load make-up in different areas, which may peak at different times.

**3.9 The Straw proposed that each EDC establish its own level of Performance-based Incentives. Should EDCs establish EDC-specific performance incentives, or should the incentive be standardized and common to all EDCs?**

Given the relatively new market for performance-based incentives for DER, the BPU should allow the EDC the flexibility to establish incentives.

**3.10 Should energy storage owners be permitted to opt in, or be subject to utility control, in order to be eligible for Distributed performance incentives?**

Customers should be permitted to opt-in to the program but required to respond to utility control in order to receive performance incentives.

**3.11 How should incentives be structured for thermal storage systems?**

EDCs should be permitted to determine incentives based on the program specifics and considering their current tariff rate structures.

**3.13 Large projects and long duration projects have the potential to qualify for significant incentives. Should incentive caps be applied in this program? If so, how (for example, by customer, project, developer, duration or meter), or other method?**

Incentive caps should be established to ensure customer bill impacts are managed to the desired level. Projects should be completed timely to meet the storage goals without significant delays.

**3.14 Should a cap be set such that the sum of federal and state incentives does not exceed a certain amount? If so, please provide details.**

Assuming the NJ SIP program charges are applicable to all customers and non-by passable, and consistent with the intent of N.J.S.A. 48:3-87.8, which puts a great emphasis on the ratepayer benefits and costs associated with energy storage, cost caps should be established to ensure customer bill impacts are managed to the desired level, similar to current cost caps for Renewable

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<sup>3</sup> <https://www.utilitydive.com/news/pjm-power-plants-blackout-risks-transition-report/624031/>; and <https://www.pjm.com/-/media/library/reports-notices/special-reports/2022/20220517-energy-transition-in-pjm-emerging-characteristics-of-a-decarbonizing-grid-white-paper-final.ashx>.

Portfolio Standards costs. Otherwise, the NJ SIP has the potential to significantly increase customer bills if left unmanaged.

### **3.16 How can BPU structure NJ SIP Performance-based Incentives to both promote value stacking and prevent double compensation?**

Staff should be mindful when considering payment eligibility from other EDC Energy Efficiency and Peak Demand programs made to resources participating in this proposed Program. While revenue stacking may be appealing, it is ultimately EDC customers who pay for the "stack".

The Company agrees with the Straw Proposal that the rate and tariff design should align with FERC Order No. 2222 and the pending PJM Compliance Filing. Specifically, FERC Order No. 2222 requires Regional Transmission Organizations ("RTO") to revise their tariffs to: "(1) allow distributed energy resources that participate in one or more retail programs to participate in its wholesale markets; (2) allow distributed energy resources to provide multiple wholesale services; and (3) include any appropriate restrictions on the distributed energy resources' participation in RTO/ISO markets through distributed energy resource aggregations, if narrowly designed to avoid counting more than once the services provided by distributed energy resources in RTO/ISO markets." FERC Order No. 2222 further requires RTOs to demonstrate in their compliance filings how they will account for the different services that distributed energy resources provide in the RTO markets. In FERC Order No. 2222, FERC found that is "appropriate for RTOs/ISOs to place narrowly designed restrictions on the RTO/ISO market participation of distributed energy resources through aggregations, if necessary to prevent double counting of services." To comply with FERC Order No. 2222's double-counting provisions, PJM has proposed to "properly account for the different services that Component DER will provide in its markets through the registration process, verifying any retail or existing wholesale activities for the Component DER and restricting wholesale participation under the DER Aggregator Participation Model where needed."

### **4.2 How can BPU assure that the incentive structure chosen will in fact provide benefits to OBCs?**

JCP&L supports the Straw Proposal's goals of incentivizing Distributed Resources to locate in overburdened communities ("OBCs"). The Board should, however, be mindful of the impact that any additional or separate incentives may have on customer bills. JCP&L also agrees with the Straw Proposal's recommendation of not providing additional incentives for Grid Supply to locate in overburdened communities, as the performance-based incentive for Grid Supply already prioritizes locating in areas with the highest carbon emissions.

It may be difficult to confirm that the participating storage has provided benefits to the OBCs.

### **5.1 How will Federal Energy Regulatory Commission ("FERC") Order 2222 affect New Jersey's energy storage market? What changes should the Board make to the NJ SIP to take advantage of PJM's pending implementation of FERC Order 2222?**

The Company agrees with the Straw Proposal that the rate and tariff design should align with FERC Order No. 2222 and the PJM Compliance Filing. FERC Order No. 2222 is still an active proceeding and the implementation efforts with PJM are ongoing with PJM's targeted implementation date of February 2, 2026 (which has not yet been approved by FERC).

Close coordination via targeted workshops and meetings is essential between the EDCs, Staff, and PJM to ensure that implementation of this portion of the NJ SIP does not conflict with or violate the objectives of FERC Order No. 2222.

**5.5 What specific best practices regarding rates and tariffs from other states should be incorporated?**

The Company suggests holding workshops for the EDCs and other parties to fully explore best practices from other states.

**5.7 How should energy storage systems be metered and measured? Can an inverter serve this function? What role should advanced metering infrastructure play in the NJ SIP?**

There should be separate requirements for front-of-the-meter (“FTM”) and behind-the-meter (“BTM”).

- FTM should have an EDC interval meter to measure and for the EDC to obtain the information needed for grid supply and PJM settlements.
- BTM storage may or may not need EDC metering, but it would require telemetry.

PJM's FO-2222 proposed metering requirement is at the premise level and would use that premise meter to determine the load reduction or grid injection capabilities.

Respectfully submitted,



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